

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

| | | | | |
|---|---|------------------------------|--|----------------------|
| RTIP ID# <i>(required)</i> | | SBDLS05 | | |
| TCWG Consideration Date | | May 24, 2011 | | |
| Project Description <i>(clearly describe project)</i> It is proposed to install traffic signals at Interstate 215 (I-215) / Palm Avenue interchange in the City of San Bernardino, San Bernardino County (see Attachment). The project scope includes; install traffic signals at two intersections northbound ramps/Palm Avenue and southbound ramps/Palm Avenue); eliminate southbound off free right turn lane; and construct curb ramps at curb return. | | | | |
| Type of Project <i>(use Table 1 on instruction sheet)</i> Intersection signalization and channelization project | | | | |
| County San Bernardino | Narrative Location/Route & Postmiles SBd-215-PM14.1 Caltrans Projects – EA# 0M400; PN 0800020070 | | | |
| Lead Agency: | | | | |
| Contact Person Tony Louka | Phone# (909)383-6385 | Fax# (909)383-6494 | Email Tony_louka@dot.ca.gov | |
| Hot Spot Pollutant of Concern <i>(check one or both)</i> PM2.5 x PM10 x | | | | |
| Federal Action for which Project-Level PM Conformity is Needed <i>(check appropriate box)</i> | | | | |
| x | Categorical Exclusion (NEPA) | EA or Draft EIS | FONSI or Final EIS | PS&E or Construction |
| Other | | | | |
| Scheduled Date of Federal Action: | | | | |
| NEPA Delegation – Project Type <i>(check appropriate box)</i> | | | | |
| Exempt | | x | Section 6004 – Categorical Exemption | |
| | | | Section 6005 – Non-Categorical Exemption | |
| Current Programming Dates <i>(as appropriate)</i> | | | | |
| | PE/Environmental | ENG | ROW | CON |
| Start | | | | |
| End | | | | |
| Project Purpose and Need (Summary): <i>(attach additional sheets as necessary)</i> There have been numerous accidents at this intersection, with majority of these being “hit Object” accidents. The purpose of this project is to reduce the severity and number of hit object accidents by installing traffic signals. By installing traffic signals at Palm Avenue and ramps intersections, Caltrans will enhance safety and improve the operation of the facility and reduce traffic delay. | | | | |
| Surrounding Land Use/Traffic Generators <i>(especially effect on diesel traffic)</i> The project is located within the urbanized area of the City of San Bernardino with combination of residential, institutional, commercial and light industrial development. California State University San Bernardino is in close vicinity to the proposed project. Interstate 215 traverses in north south direction through densely populated urban areas of surrounding cities of Riverside, Colton, San Bernardino, and Highland serving local businesses, residents and school districts in the areas. | | | | |

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|--|---|
| Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility MAIN LINE (Southbound) | |
| Existing (2010): | LOS C/B (AM/PM); AADT 33,500+31,700=65,200; Trucks 9%; |
| OPENING- (2011): | LOS C/B AM/PM); AADT 34,500+32,700=67,200; Trucks 9% |
| RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility MAIN LINE (Northbound) | |
| HORIZON- (2030) | LOS C/B (AM/PM); AADT 59,800+57,500=117,300; Trucks 10% |
| Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT | |
| NO-Build at Palm Avenue/NB On-%Off –Ramp year 2010, 2011 (Stop sign) ; LOS C (PM); AADT 19,884;TR% 6-8 NO-Build at Palm Avenue/SB On-%Off–Ramp/Kendall Dr. year 2010,2011(SS):LOS E (PM); AADT 8,400; TR% 6-8 NO-Build- On-Ramps/Off-ramp AADT year 2010 -5,600/6,900, 2011 5,800/7,000, 2030 9,000/11,000;; | |
| Build at Palm Avenue/NB On-%Off –Ramp year 2011 (signalized); LOS A (PM) Build at Palm Avenue/SB On-%Off –Ramp/Kendall Dr. year, 2011 (Signalized): LOS C (PM) NO-Build- On-Ramps/Off-ramp AADT year 2010 -6,900/5,600, 2011 , 7,000/5,800, 2030 11,00/9,000;; | |
| RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT | |
| Build at Palm Avenue/NB On-%Off –Ramp year 2030 (signalized); LOS B (PM); AADT 27,036; TR% 6 Build at Palm Avenue/SB On-%Off –Ramp/Kendall Dr. year, 2030 (Signalized): LOS E (PM); AADT 10,356; TR% 6 NOTE: TR%= trucks percentage in AADT; Kendall Dr. is one lane in each direction | |
| Describe potential traffic redistribution effects of congestion relief (impact on other facilities) | |
| The proposed project is intersection signalization project that aims not to increase capacity rather it will increase traffic operational efficiency and reduce delays and number of traffic accidents experienced at the intersections of freeway ramps both north and southbound ramps with Palm Avenue by installing the signal lights. | |
| Comments/Explanation/Details (attach additional sheets as necessary) | |
| According to the Transportation conformity Guidance for Qualitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas (page 25), this project is not a <i>project of air quality concern (POAQC)</i> under 40 CFR 93.123(b)(1)(i) and (ii): | |
| <ul style="list-style-type: none"> Intersection channelization project, traffic circles or roundabouts, Intersection signalization projects at individual intersections, and interchanges configuration projects that are designed to improve traffic flow and vehicle speeds, and do not involve any increases in idling..Thus , they would be expected to have neutral or positive influence on PM2.5 or PM10 emissions. Besides the proposed project (intersection signalization) traffic data(AADT, Truck % and LOS) provided above for Palm Avenue and Ramps intersection is less than Criteria for POAQC: AADT =>125,000 and Truck percentage = or > 8 % of (125,000)=10,000 trucks. The LOS of service criteria D,E, and F are not worsened with this project.(see reference below for POAQC criteria ;and example of project of air quality concern (POAQC) given at page 24 of the Guidance)- | |

REFERENCE:

Criteria for Projects of Air Quality Concern (40 CFR 93.123(b)(1)) – PM₁₀ and PM_{2.5} Hot Spots

- (i) *New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;*
- (ii) *Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;*
- (iii) *New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;*
- (iv) *Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and*
- (v) *Projects in or affecting locations, areas, or categories of sites which are identified in the PM₁₀ or PM_{2.5} applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.*

| | | | | | | | | |
|--|--|-----------------------|------------------------|----------------|--------------|--|--|--|
| STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | | FUNCTIONAL SUPERVISOR | CALCULATED-DESIGNED BY | DON D NGUYEN | REVISED BY | | | |
| Caltrans DESIGN DIVISION | | DU LU | CHECKED BY | MANOJ B HARIYA | DATE REVISED | | | |



WORKING AREA MAP

| | | | | |
|------|--------|-------|-------------|-------------|
| 01st | COUNTY | ROUTE | TOTAL MILES | SHEET TOTAL |
| 08 | SBD | 215 | 14.091 | 1 |

| | |
|---------------------------|------|
| REGISTERED CIVIL ENGINEER | DATE |
| PLANS APPROVAL DATE | |

THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
 THE DESIGN SHALL NOT BE A GUARANTEE OF THE
 CORRECTNESS OF THE PLAN SHEET

| INDEX OF PLANS | SHEET NO. | DESCRIPTION |
|----------------|-----------|------------------------|
| 1 | 1 | General Notes |
| 2 | 2 | Plan of the Project |
| 3 | 3 | Section of the Project |
| 4 | 4 | Details of the Project |
| 5 | 5 | Details of the Project |
| 6 | 6 | Details of the Project |
| 7 | 7 | Details of the Project |
| 8 | 8 | Details of the Project |
| 9 | 9 | Details of the Project |
| 10 | 10 | Details of the Project |
| 11 | 11 | Details of the Project |
| 12 | 12 | Details of the Project |
| 13 | 13 | Details of the Project |
| 14 | 14 | Details of the Project |
| 15 | 15 | Details of the Project |
| 16 | 16 | Details of the Project |
| 17 | 17 | Details of the Project |
| 18 | 18 | Details of the Project |
| 19 | 19 | Details of the Project |
| 20 | 20 | Details of the Project |
| 21 | 21 | Details of the Project |
| 22 | 22 | Details of the Project |
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| 25 | 25 | Details of the Project |
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| 93 | 93 | Details of the Project |
| 94 | 94 | Details of the Project |
| 95 | 95 | Details of the Project |
| 96 | 96 | Details of the Project |
| 97 | 97 | Details of the Project |
| 98 | 98 | Details of the Project |
| 99 | 99 | Details of the Project |
| 100 | 100 | Details of the Project |

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



NO SCALE

PRELIMINARY

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

BORDER LAST REVISED 7/2/2010 CALTRANS WEB SITE IS: [HTTP://WWW.DOT.CA.GOV/](http://www.dot.ca.gov/)

| | 0 | 1 | 2 | 3 |
|---------------------------------------|-----------------|---|---|---|
| RELATIVE BORDER SCALE IS IN INCHES | | | | |
| USERNAME -> | a129159 | | | |
| DGN FILE -> | 83U4G016D01.dgn | | | |

| | | |
|-----------|------------------------|------------|
| UNIT 2245 | PROJECT NUMBER & PHASE | 0800200701 |
|-----------|------------------------|------------|

| | |
|--------------|--------------|
| CONTRACT No. | 08 - OM 4004 |
| PROJECT ID | 0000000000 |

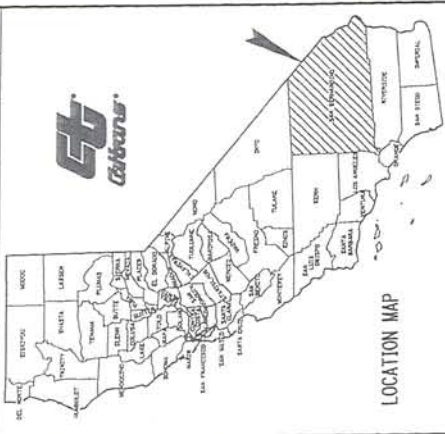
| | |
|---------------------------|------|
| PROJECT ENGINEER | DATE |
| REGISTERED CIVIL ENGINEER | |

PLANS APPROVAL DATE _____



| | |
|-----------------------------|-----------------------|
| DATE PLOTTED => 04-APR-2011 | TIME PLOTTED => 13:10 |
|-----------------------------|-----------------------|

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
|------|--------|-------|-----------------------------|--------------|-----------------|
| 08 | Sbd | 215 | 14.1 | | |



LOCATION MAP

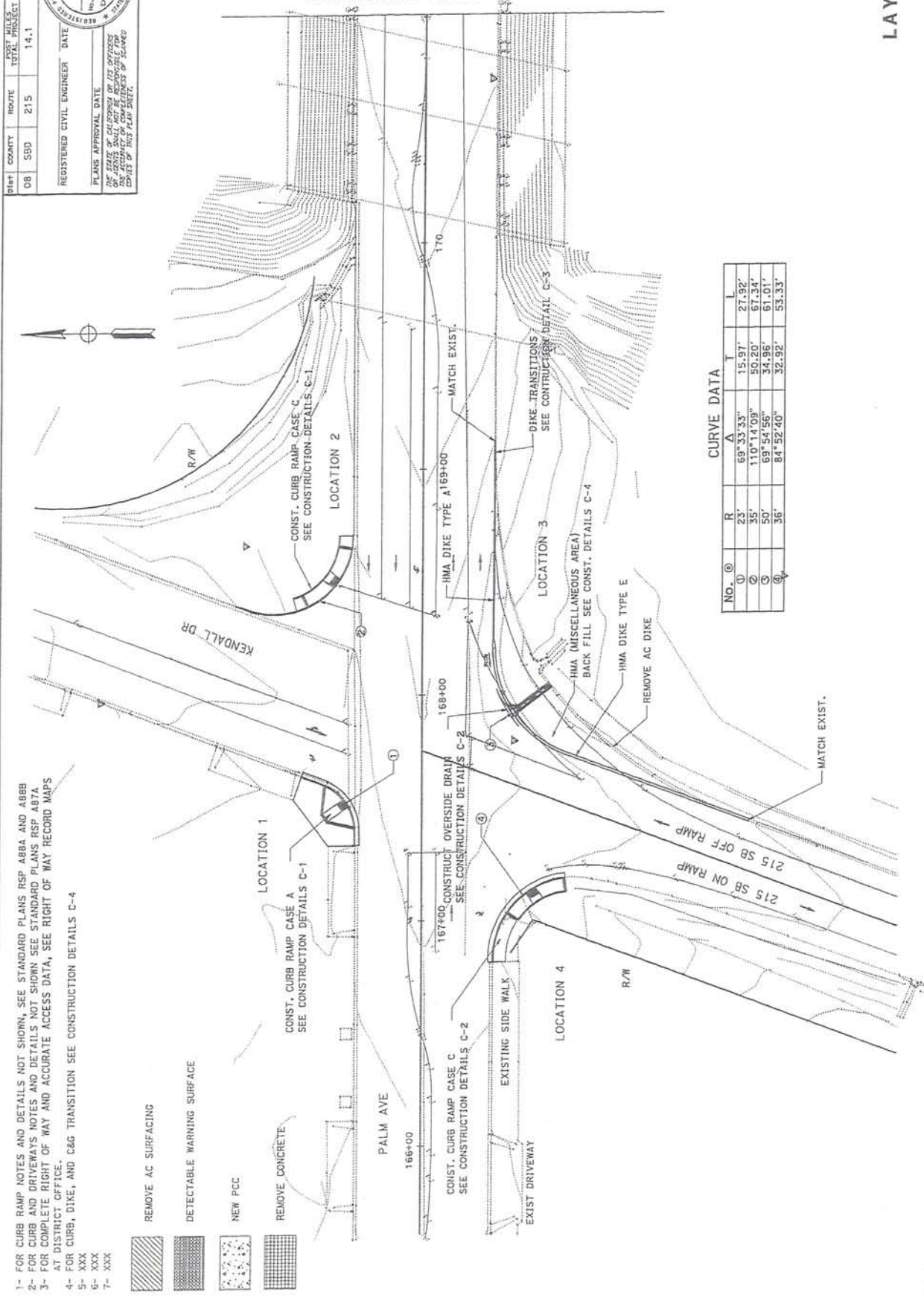
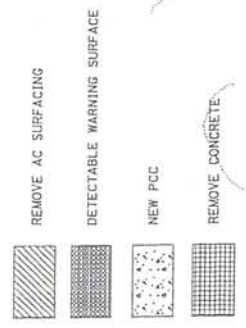
| | | | | |
|------|--------|-------|------------|-------------|
| DIST | COUNTY | ROUTE | POST MILES | SHEET TOTAL |
| 08 | SBD | 215 | 14.1 | 14.1 |

| | |
|---------------------------|------|
| REGISTERED CIVIL ENGINEER | DATE |
| | |

| |
|---------------------|
| PLANS APPROVAL DATE |
| |

NO DATE CALCULATION OF 100' OFFICES
NO ASSURANCE OF CONSTRUCTION OF SCALERS
NO DATE OF THIS PLAN SHEET

- NOTE:
- 1- FOR CURB RAMP NOTES AND DETAILS NOT SHOWN, SEE STANDARD PLANS RSP 488A AND 488B
 - 2- FOR CURB AND DRIVEWAYS NOTES AND DETAILS NOT SHOWN SEE STANDARD PLANS RSP 487A
 - 3- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
 - 4- FOR CURB, DIKE, AND C&G TRANSITION SEE CONSTRUCTION DETAILS C-4
 - 5- XXX
 - 6- XXX
 - 7- XXX



CURVE DATA

| NO. | ① | R | A | T | L |
|-----|-----|------------|--------|--------|--------|
| 1 | 23' | 69°33'33" | 15.37' | 27.92' | 27.92' |
| 2 | 35' | 110°14'09" | 50.20' | 67.34' | 67.34' |
| 3 | 50' | 69°54'56" | 34.96' | 61.01' | 61.01' |
| 4 | 36' | 84°52'40" | 32.92' | 53.33' | 53.33' |

LAYOUT L-1

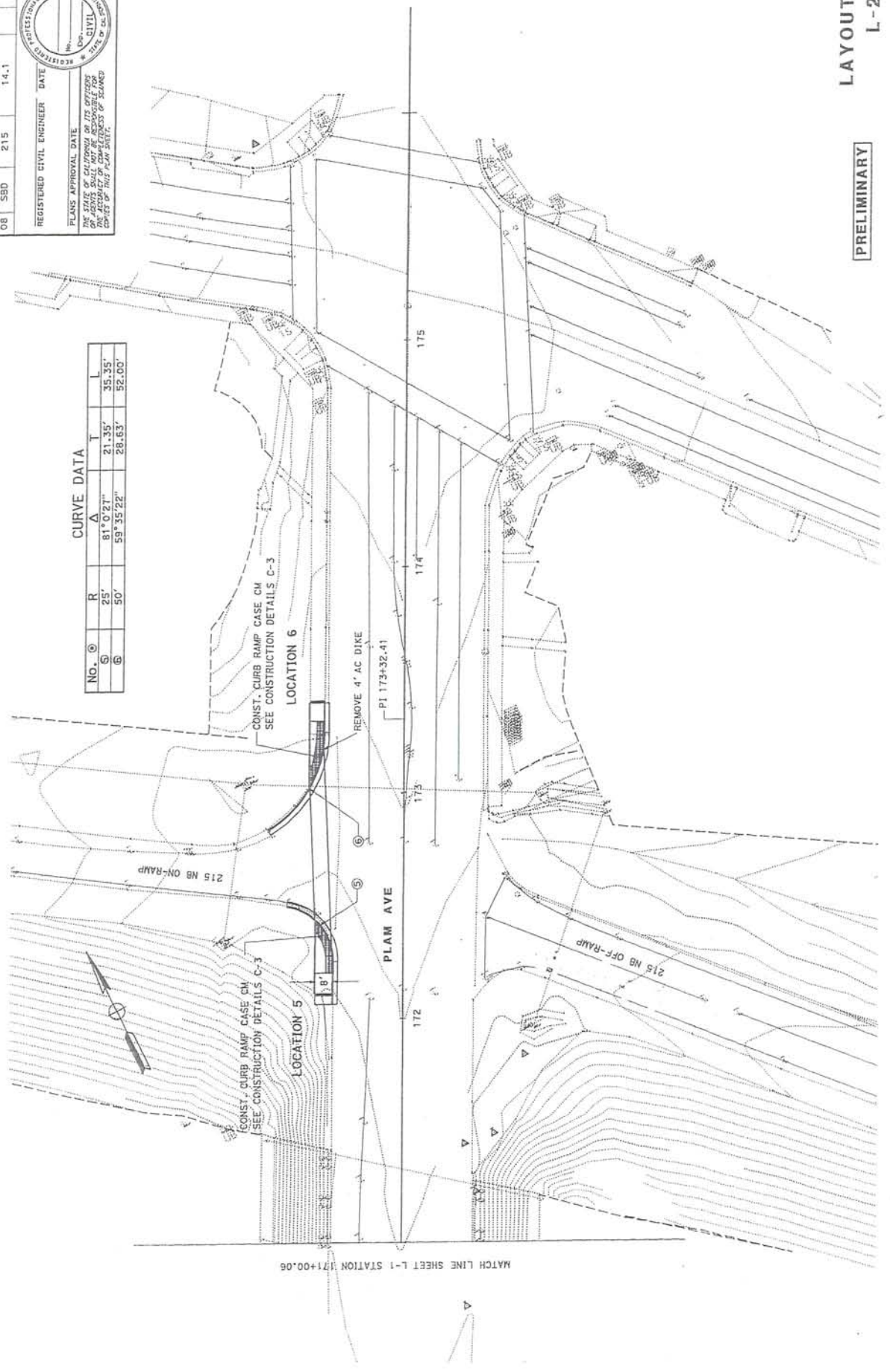
| | | | | |
|------|--------|-------|------------|-------------|
| DIST | COUNTY | ROUTE | POST MILES | SHEET TOTAL |
| 08 | S9D | 215 | 14.1 | NO. SHEETS |

| | |
|---------------------------|------|
| REGISTERED CIVIL ENGINEER | DATE |
| | |

| | |
|--|--|
| PLANS APPROVAL DATE | |
| THE STATE OF CALIFORNIA OR ITS OFFICERS | |
| FOR THE PURPOSE OF THE VERIFICATION OF THE ACCURACY OF THE PLAN SHEET. | |

CURVE DATA

| NO. | R | Δ | T | L |
|-----|-----|-------------|--------|--------|
| ⑤ | 25' | 81° 0' 21" | 21.35' | 35.35' |
| ⑥ | 50' | 59° 35' 22" | 28.63' | 52.00' |



LAYOUT
L-2
SCALE: 1" = 20'

PRELIMINARY

| | |
|---------------------------|----------------|
| DATE PLOTTED: 12-APR-2011 | DATE: 04-28-11 |
| PROJECT NUMBER & PHASE | UNIT 2245 |
| RELATIVE BORDER SCALE | IS IN INCHES |
| REVISIONS | |
| DESIGNED BY | |
| CHECKED BY | |
| DATE REVISED | |